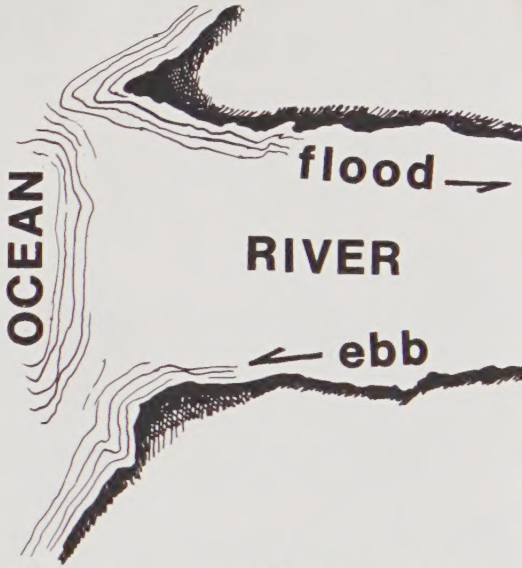
COLUMBIA RIVER BAR GUIDE

Photo courtesy Oregon State Marine Board

TIDES--changes in the water level--are caused by the gravitational pulls of the sun and moon. There are roughly two tides daily along the Pacific Northwest. *FLOOD* is the tidal movement towards shore; *EBB* is the movement away from shore or downstream. *SLACK WATER* is when there is no tidal movement. *TIDAL CURRENT* is the flow of water.

Along Washington and Oregon, tidal current can obtain considerable velocity, especially when the ebb tide is reinforced by river runoff.

B-A-R SPELLS DANGER



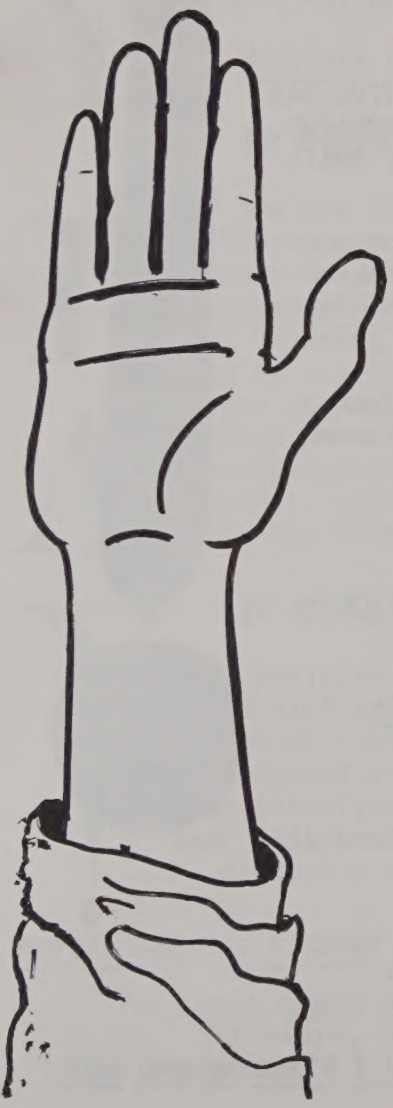
THE MOST DANGEROUS CONDITION--when a swift ebb current meets heavy seas rolling in from the Pacific at the shallow river entrance (the *BAR*.) Then the water "piles up" and "breaks." Even on calm days, a swift ebb tide may create a bar condition that is too rough for small craft (any boat under 65'). Cross from harbor to ocean only on slack water, flood tides or when the sea is calm.

If you are inside the bar when rough conditions exist, *REMAIN INSIDE*. If you are trapped outside a rough bar on an ebb current, *WAIT A FEW HOURS UNTIL THE FLOOD*.

SANDS, SPITS and *SHOALS* are shallow areas at river entrances where waves build up. These areas are dangerous and should be *AVOIDED AT ALL TIMES*.

In a bar area, sea conditions can change rapidly and without warning. Always cross it with caution.

"STOP!"



Do the following hazardous conditions exist on your boat? Correct them now so the Coast Guard doesn't have you return later to a safe moorage to remedy them.

*Overloading

*Fuel leakage

*Accumulation of fuel in bilges

*Improper backfire flame control equipment

*Failure to display proper lights at night

*Improper ventilation of engine and fuel tank compartments

*Insufficient lifesaving devices and fire extinguishers

JUST IN CASE, CARRY ABOARD:

*Day and Night Flares (in waterproof packet)

*Compass

*Anchor

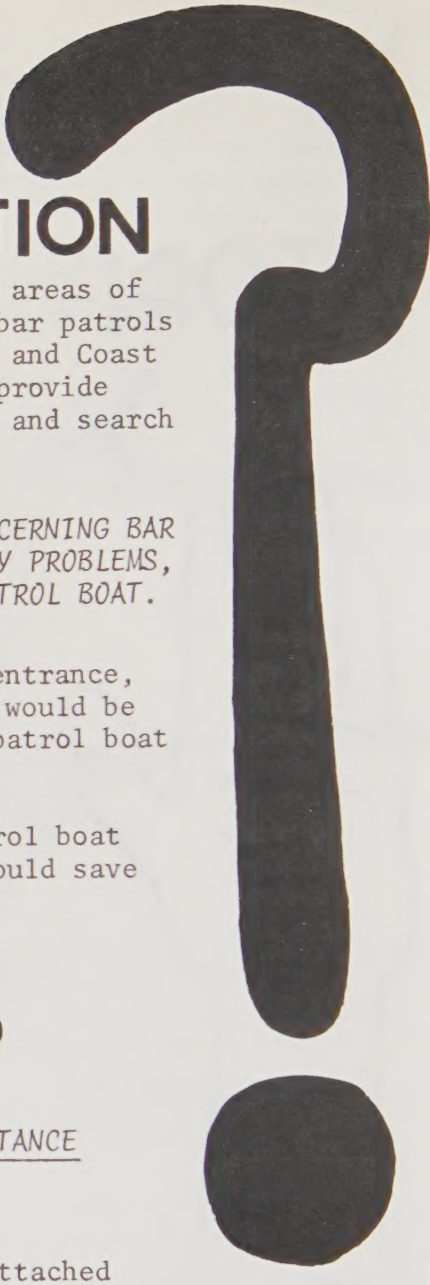
*Mirror

*Paddles

*First Aid Kit

*Fishing Line and Sinker (for depth soundings)

HAVE A QUESTION



At the river entrances and in areas of concentrated boating, safety or bar patrols are conducted by the Coast Guard and Coast Guard Auxiliary. These patrols provide assistance of an advisory nature and search and rescue.

IF YOU HAVE ANY QUESTIONS CONCERNING BAR OR WEATHER CONDITIONS OR HAVE ANY PROBLEMS, DON'T HESITATE TO CONTACT THE PATROL BOAT.

If you are outside the river entrance, the bar is rough and you feel it would be dangerous to cross, contact the patrol boat for assistance.

When you're hailed by the patrol boat and given advice--heed it. It could save your life!

NEED HELP

VISUAL WAYS TO ATTRACT ASSISTANCE

*Hoist a lifejacket in the mast

*Wave an oar with a lifejacket attached

*Use flares or a mirror

*Place one pole up and one pole down (Commercial Fishermen)

If you're in an unstable boat, DON'T STAND UP AND WAVE!

M is the international distress call transmitted on 2182 khz or channel 16 (FM). *MAYDAY* is to be used only in the presence of grave and imminent danger, not just merely for a mechanical breakdown.

A If you are *IN DISTRESS*, call *"MAYDAY, MAYDAY, MAYDAY, THIS IS* (Vessel's call and name repeated three times)." Don't wait for an answer and continue talking until assisting party knows your location and extent of distress.

Y For *INFORMATION* or *ASSISTANCE* (other than distress) from the *COAST GUARD* call *"COAST GUARD"* on 2182 khz or channel 16 (FM).

WHENEVER CALLING, SPEAK SLOWLY AND CLEARLY

IF ABOARD VESSEL IN TROUBLE, GIVE:

D
- *WHO* you are (vessel's call and name)
- *WHERE* you are (position in latitude/longitude or true bearing and distance in nautical miles from widely-known geographical point)
- *WHAT* is wrong (nature of distress or difficulty)
- Kind of assistance desired
- Number of people aboard and condition of injured
- Current seaworthiness of vessel
- Description of vessel--length, type cabin, masts, power, colors of hull, trim and superstructure
- Listening frequency and schedule

A

IF OBSERVING THE VESSEL, GIVE:

Y
- Your position and bearing and distance of vessel in difficulty
- Nature of distress or difficulty
- Description of vessel in distress or difficulty
- Your intentions, speed, course
- Your radio call sign, vessel name, listening frequency and schedule

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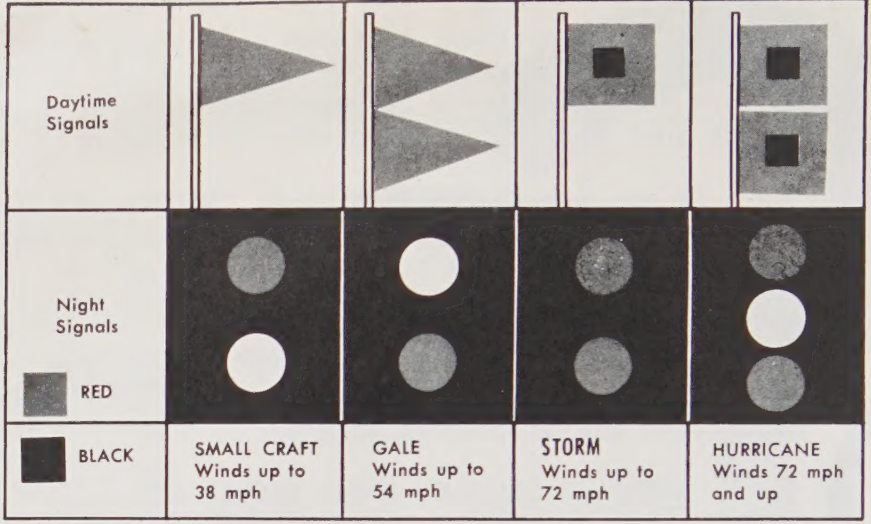
NOTIFY THE COAST GUARD AS SOON AS THE EMERGENCY TERMINATES

The Coast Guard doesn't monitor citizen's band radio. Therefore, users should establish their own base ashore.



KEEP AN EYE ON THE WEATHER

At selected locations in and near boating areas, storm warnings are displayed by flag hoists or lights. Display points are usually Coast Guard stations, yacht marinas or municipal piers. A boatman should become familiar with the display stations in his area and the meanings of the signals. Don't ignore a *SMALL CRAFT ADVISORY!* (Don't forget that a *SMALL CRAFT* is a boat *UNDER 65' IN LENGTH!*) Remember too, that you can encounter bad weather even with a fair forecast and no storm signals flying. For example, thunderstorms and squalls are often unpredictable, yet they can be very dangerous.

AND YOUR HANDS OFF THE BUOYS!

The law forbids any person to interfere with, remove, move, make fast to or willfully damage any aid to navigation maintained or authorized by the Coast Guard. Violation of this law subjects that person to a fine up to $500.

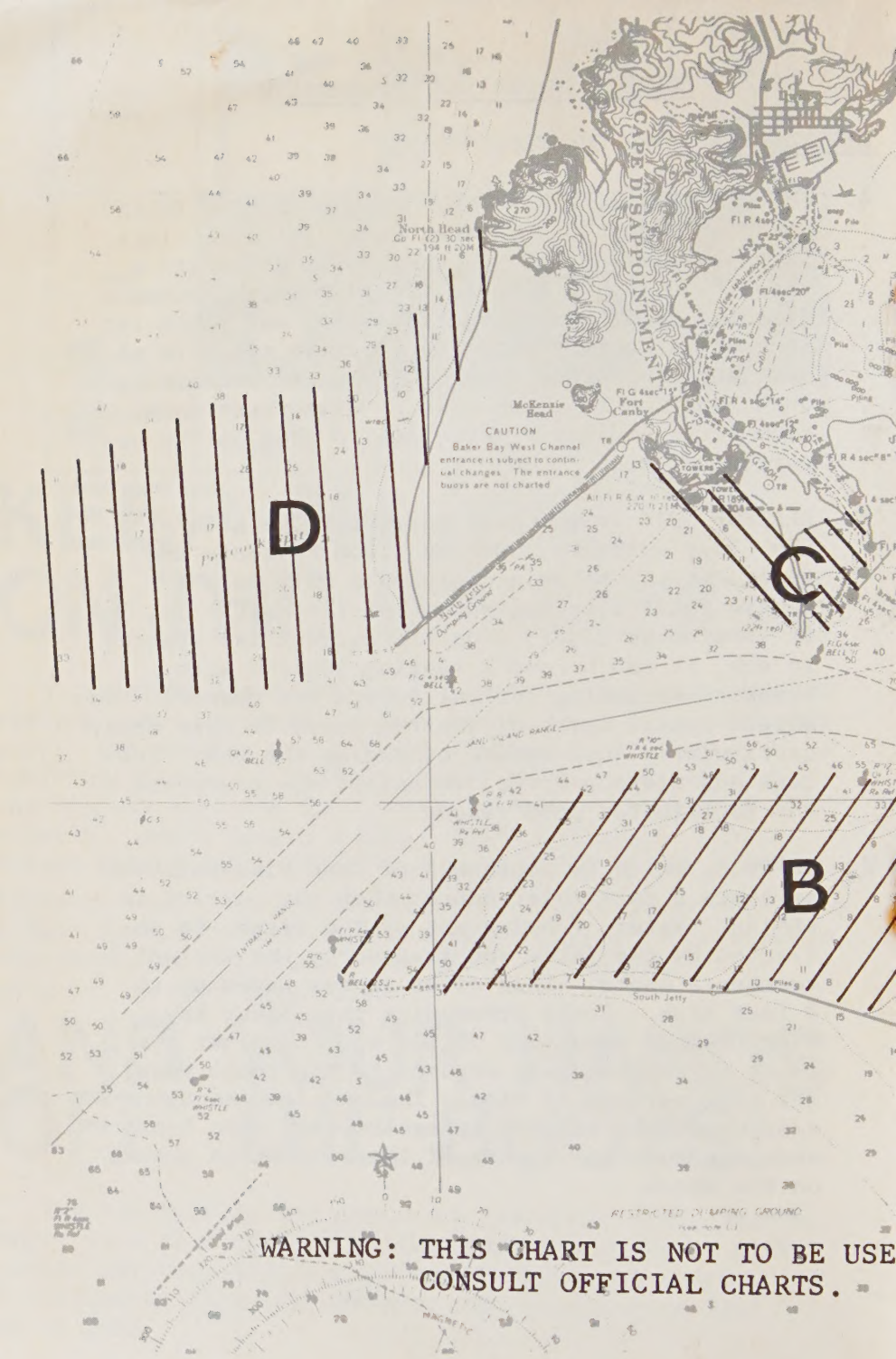
COLUMBIA RIVER BAR INFORMATION

DANGER AREAS (SEE CHARTLET)

A. CHINOOK SPUR, UPPER, LOWER AND MIDDLE SAND ISLAND SPURS are built on two rows of staggered pilings. Currents flowing through these pilings attain a velocity of up to 5 knots. A boat which becomes disabled or is maneuvered in such a way as to let it come in contact with any of these spurs is almost sure to suffer damage. Even large boats have been capsized in these areas. Give these spurs a wide berth and never get close to them on the up-current side.

B. CLATSOP SPIT is the most unpredictable area of the river entrance. During flood currents and slacks it may be relatively calm with only a gentle swell breaking far in on the spit. Yet 5 or 10 minutes later, when the current has started to ebb, it can become a roaring monster with breakers extending far out toward the channel. You should remain north of the red buoys in this area, particularly just before or during the ebb. Peacock and Clatsop Spits are called the graveyard of the Pacific for good reason.

C. JETTY A, which is southeast of Cape Disappointment presents a particular danger when the current is ebbing. Water, flowing out of the river, is deflected by the jetty and frequently the current reaches 8 knots. This often causes waves up to 8 feet high. Boats proceeding into Baker Bay West Channel make very little speed against the swift current and are exposed to the rough water for long periods of time. The shallow, sandy area should be avoided by small craft when heavy seas are running because of the surf which breaks on the beach.



WARNING: THIS CHART IS NOT TO BE USE
CONSULT OFFICIAL CHARTS.

FOR NAVIGATION.

DANGER AREAS (SEE CHARTLET)

D. PEACOCK SPIT. The gentle swell encountered in the channel is somehow magnified here and the breakers are heavy in any type of current. Sports craft leaving the river should NEVER be on the north side of the black buoys. When rounding Peacock Spit, even on a nice summer day, one should give the breakers at least a half-mile clearance. Many times on these same summer days "sneakers" or unusually large swells coming in from the sea suddenly commence breaking 1/4 to 1/2 mile outside the usual break on the end of the north jetty. Along with Peacock Spit, Clatsop Spit is the gravest danger faced by the sport fisherman.

RANGE MARKERS

The Columbia River entrance range consists of: (FRONT) a white square daymark with a black vertical stripe, (REAR) a white diamond with a black vertical stripe.

The Sand Island range consists of: (FRONT) a white square daymark with a red vertical stripe, (REAR) a white diamond daymark with a red vertical stripe. By steering a course which keeps the Range Markers in line, the boatman will remain within the channel.

BAR CONDITION REPORTS

Bar condition reports for the Columbia River entrance are given at 15 minutes before the hour and 15 minutes after the hour by Radio KAST on 1370 khz and Radio KVAS on 1230 khz. Bar conditions are also available by calling the Coast Guard Station number 642-3565.

CHART

These chartlets are provided to aid small craft operators in identifying local danger areas. They are not intended to be used for navigation. For current, detailed information concerning local navigation consult the applicable Coast Guard Light Lists, Coast Pilots, Local Notices to Mariners and official navigation charts.

BUOYS - SIGNPOSTS FOR THE BOATMAN

NUN BUOY 8
Red color, even number [Leave to starboard]

RED AND BLACK (JUNCTION) BUOY
Topmost band red, preferred channel is to left of buoy, no number

MAIN CHANNEL

SECONDARY CHANNEL

RED

BLACK

SPAR BUOY 2
Red color, even number, secondary channel starts new numbering system [Leave to starboard]

CAN BUOYS 3, 5, 7
Coloring black, odd numbers increasing toward head of navigation [Leave to port]

LIGHTED BUOY 6
Coloring red, even number, quick flashing red or white—60 or more flashes per minute

NUN BUOY 4
Coloring red, even number. Numbers increasing toward head of navigation [Leave to starboard]

LIGHTED WHISTLE BUOY 1
Black in color; odd number; white or green light, regular or quick flashing [Leave to port proceeding upstream]

Proceeding toward head of navigation from seaward

LIGHTED BELL BUOY 2
Red in color, with even number, white or red light, regular flashing (30 flashes per minute) or quick flashing (60 flashes per minute) [Leave to starboard when proceeding toward head of navigation (upstream)]

MID CHANNEL BUOY
No number, black and white vertical stripes [Should be passed close to, on either side] Light: white with short-long flashes

WHAT TO DO IN CASE OF:

FOG--Commonly encountered in this area, fog moves rapidly and can reduce visibility drastically in a matter of seconds. Thus collisions and loss of bearings become very likely. Always check the weather before leaving port--if it's foggy, wait until the fog lifts. *Pay close attention to the weather at all times and when fog approaches, come in.* If trapped by fog, reduce speed, keep a good lookout and try to find your way into a safe area. If near a danger area or in shallow or unfamiliar waters, drop anchor until the fog lifts. Carry a compass and take your outgoing bearings--to determine your inbound course, add 180 degrees to your outbound one. Carry spare fishing line and sinker to take depth soundings.

ENGINE FAILURE--First drop your anchor to keep from drifting into danger areas or out to sea. If your engine won't restart, use visual signals to attract the attention of passing boats or use the radio to contact the Coast Guard.

CAPSIZING--A lifesaving device will greatly improve your chances of survival. Keep everyone together and stay with the boat; it will keep you afloat and make it easier to locate you. Use flares to attract attention. If trapped inside the hull, don't attempt to cut your way out.

WHATEVER YOU DO--

DON'T PANIC!

WATCH OUT!

*A few people moving about in a small boat have a tremendous effect on the boat's stability. Here are a few things to remember:

*Distribute the load evenly
*Don't stand up in a small boat
*Don't overload
*Keep the load low

CHART YOUR COURSE

Charts are the road maps of the waterways, and as such they aid the boatman in safe operation. They contain a wealth of important information such as water depths, obstructions, buoy locations, landmarks, shorelines, distance and course measuring provisions. The chart must be carefully studied to make the greatest use of all the information provided. Coast and Geodetic Survey Chart I contains a list of chart abbreviations and symbols which are helpful to the understanding of navigational charts.

DON'T PUT IT OFF-

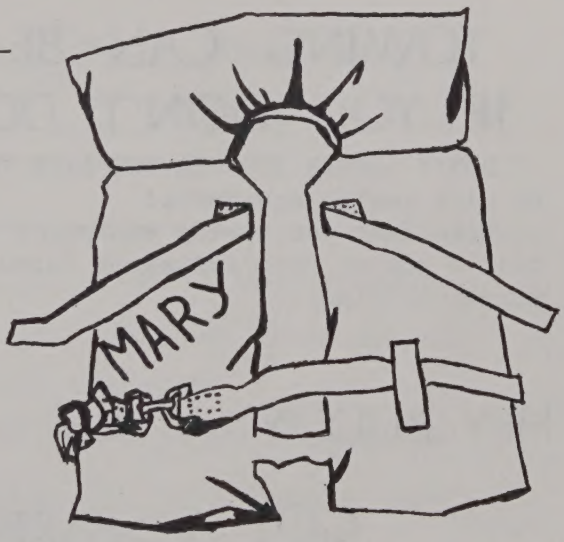
INSPECT THEM

ADJUST THEM

LABEL THEM

BEFORE LEAVING THE DOCK

PUT IT ON!!



A LITTLE FORESIGHT....

could prevent a minor mishap or a disaster from occurring. Using manufacturers' specifications as guidelines, establish a maintenance checklist for your boat. In addition, make the following checks part of your normal operating procedure:

*Adequately ventilate engine and fuel spaces at all times

*Tighten connections on all electrical and fuel systems

*Before fueling, shut all electrical and LP gas systems

*After fueling, open and ventilate fuel and engine spaces to eliminate flammable vapors before re-starting the engine

*Examine all parts of the steering system for wear, loss of fluid, damage and loose connections

*Frequently clean fuel filters, lines and sediment bowls

*Check battery charge and water level

TOWING CAN BE A DRAG-- IF YOU DON'T DO IT RIGHT!

DON'T SECURE THE HEAVING LINE TO YOUR BOAT, it's used to pass towing equipment!

Make fast the towing equipment to the ring in your boat's bow or else secure it forward enough so it's firmly in place.

HEY BUDDY, GOT A SPARE....

*Sparkplugs
*Points
*Condensers
*Distributor Caps
*Shear Pins

GOING SOMEWHERE?

Leave a float plan with a friend, relative or marina operator. Should disaster strike, a few minutes could mean a lifetime of difference. Here's a sample plan:

Name of boat operator_____
Home phone number_____Business phone number_____

Boat type_____Color of hull_____
Color of trim_____Registration number_____
Name_____Make_____Length_____Other_____

Engine: Type_____Horsepower____Normal fuel (gallons)_____

Number of persons aboard (including operator)_____
Name Age Address/Phone Number

_____
_____

Survival Equipment:
Lifejackets (number)____flares_____mirror_____
Flashlight_____food_____paddles_____
Water_____cushions_____

Radio_____Frequencies_____

Itinerary:
Depart_____from_____on_____(time, date)
Going to_____or_____
Expect to return by_____(time, date) and in no event later than_____

Other Information_____

Auto license number_____Trailer license number_____

If not returned by_____call the Coast Guard or local authority at_____

*Upon your return, notify the person to whom the float plan was given.
*If you were reported to the Coast Guard as overdue, notify them of your arrival.

1 ASSIST

Summer safety patrols are carried on by Auxiliarists at dangerous bars along the Washington and Oregon coasts. Helping the regular Coast Guard, Auxiliarists log over 500 cases yearly.

2 EXAMINE

Free courtesy motorboat examinations (CME) are given by Auxiliarists to insure that boats meet legal requirements and safe boating needs. The CME lets boatmen know what deficiencies need to be corrected so time on the water can be safer and more enjoyable. Remember that the CME sticker is the "Seal of Safety!"

3 EDUCATE

Motor and sail enthusiasts can learn seamanship; the rules of the road; chart and compass reading and navigation at the free classes conducted by Auxiliarists.

Does Safe Boating sound interesting to you? Then look into taking a boating education class or joining the Coast Guard Auxiliary. Just write or call:

Director of Auxiliary
915 Second Avenue
Seattle, Washington 98174
(206) 442-7355

COAST GUARD AUXILIARY

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